

# Clojure & Other Friends

*“Promiscuous Lisp”*

Russ Miles

Simplicity *itself*

**Change**

**Who, How and When**

Subjectivity



# Software Transaction Memory vs. Type Safety!?

# Setting the Scene

**Insurance?**  
**Investment Banking?**  
**Media?**  
**Defence?**  
**Search?**

A LONG TIME AGO IN A GALAXY FAR, FAR AWAY...



THE PHANTOM MENACE

ATTACK OF THE CLONES

REVENGE  
OF THE  
SITH

A NEW HOPE

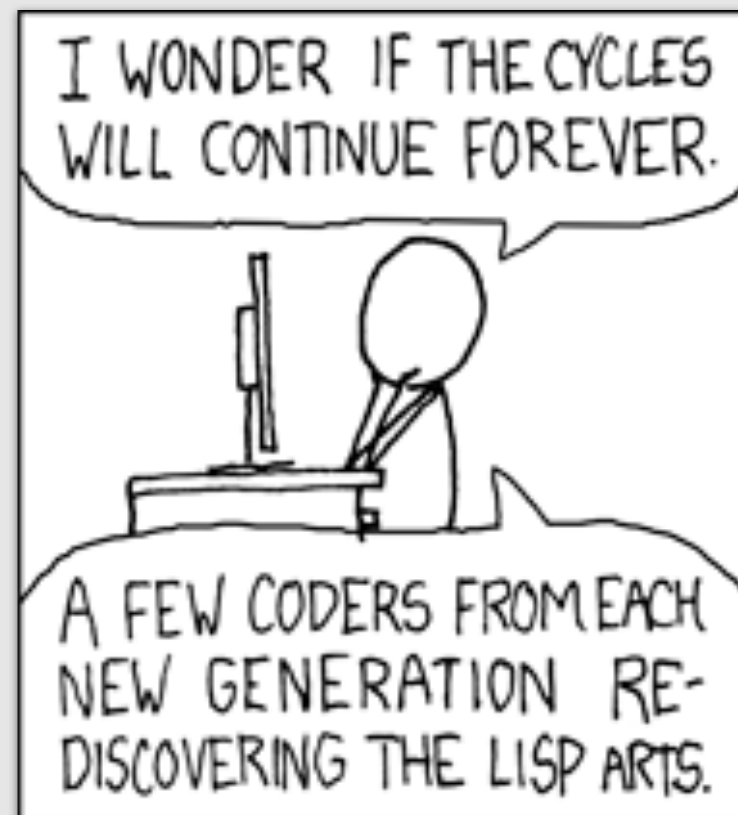
THE  
EMPIRE  
STRIKES BACK

RETURN  
OF THE  
JEDI

STAR  
WARS

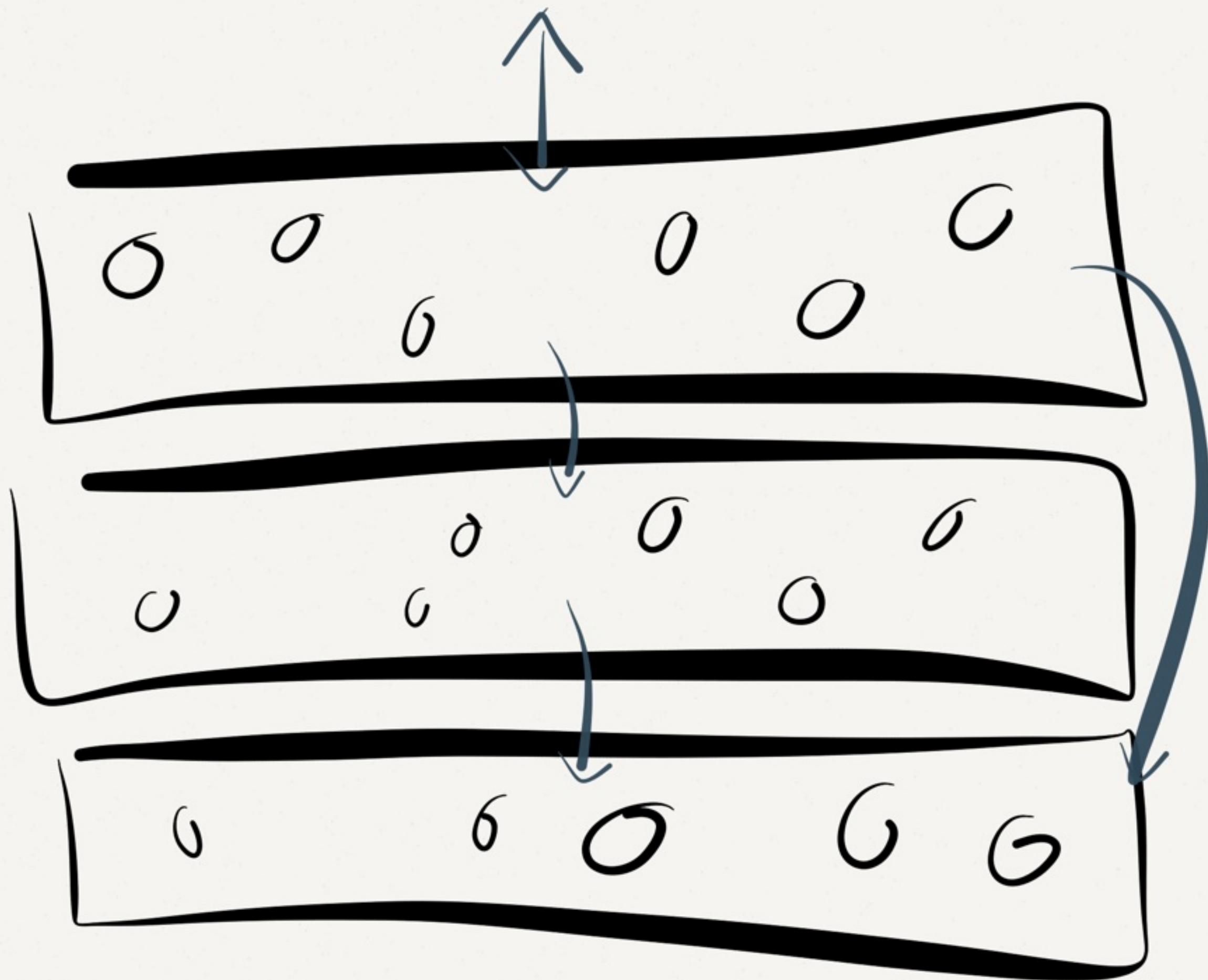
Licensing...

# Large-Scale-Battle In-A-Vaccum



**“The Republic”**











**Configured, Integrated**

**One Architect of All**

**It Penetrates Us**

**It Binds Us**

**It Configure Us?!**



The force!?





Spring.

A hand-drawn cloud with a thick black outline and several short, straight lines radiating from its edges to represent rays of light. The word "Spring." is written in a cursive, handwritten style inside the cloud.

Enterprise

Empire

Java; write once,  
run anywhere

Java; everywhere!

# Meet Darth Sidious!?



# Meet Emperor!?



# Meet Chancellor Palpatine...

## Key Technical Characteristics

Manages building, configuration,  
transactions, infrastructure,  
dictatorship

Java? Of course...



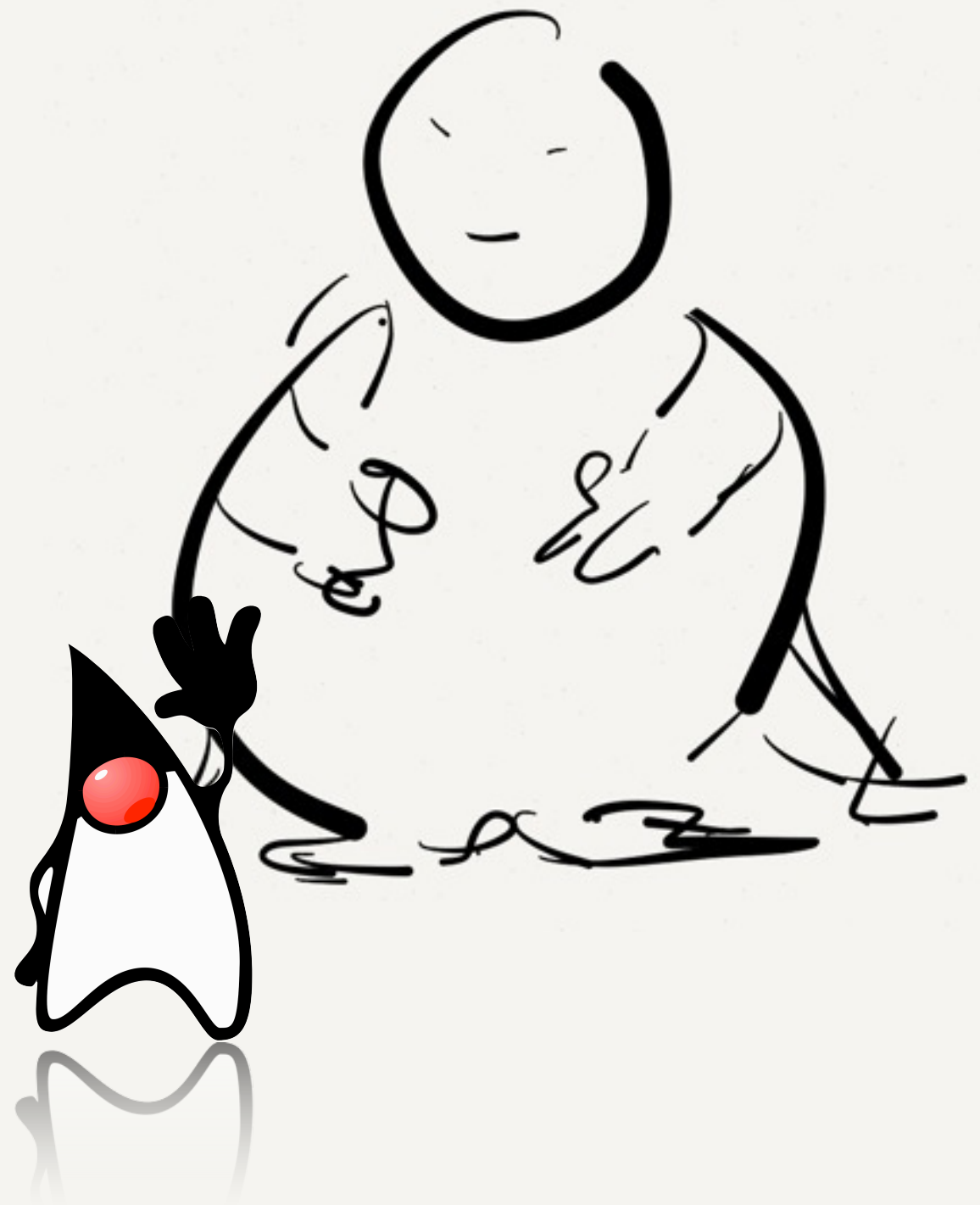


# Meet Chancellor Palpatine...

Key Technical Characteristics

Manages building, configuration,  
transactions, infrastructure,  
dictatorship

Java? Of course...



Organise

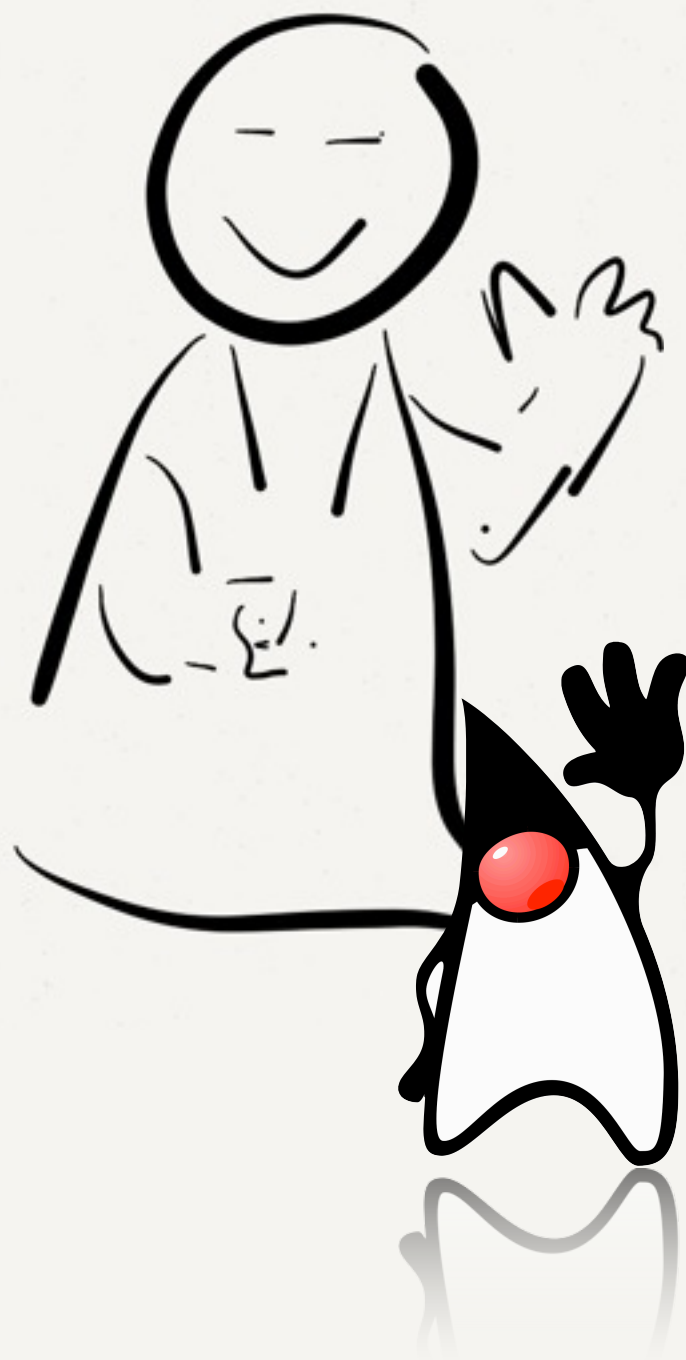
Reduce

Simplicity

Hide



Palpatine



Delegates to



Anakin



**Nasty Side Effects...**

Logic

+

Side-effect

Extract  
+  
Hide



Logic

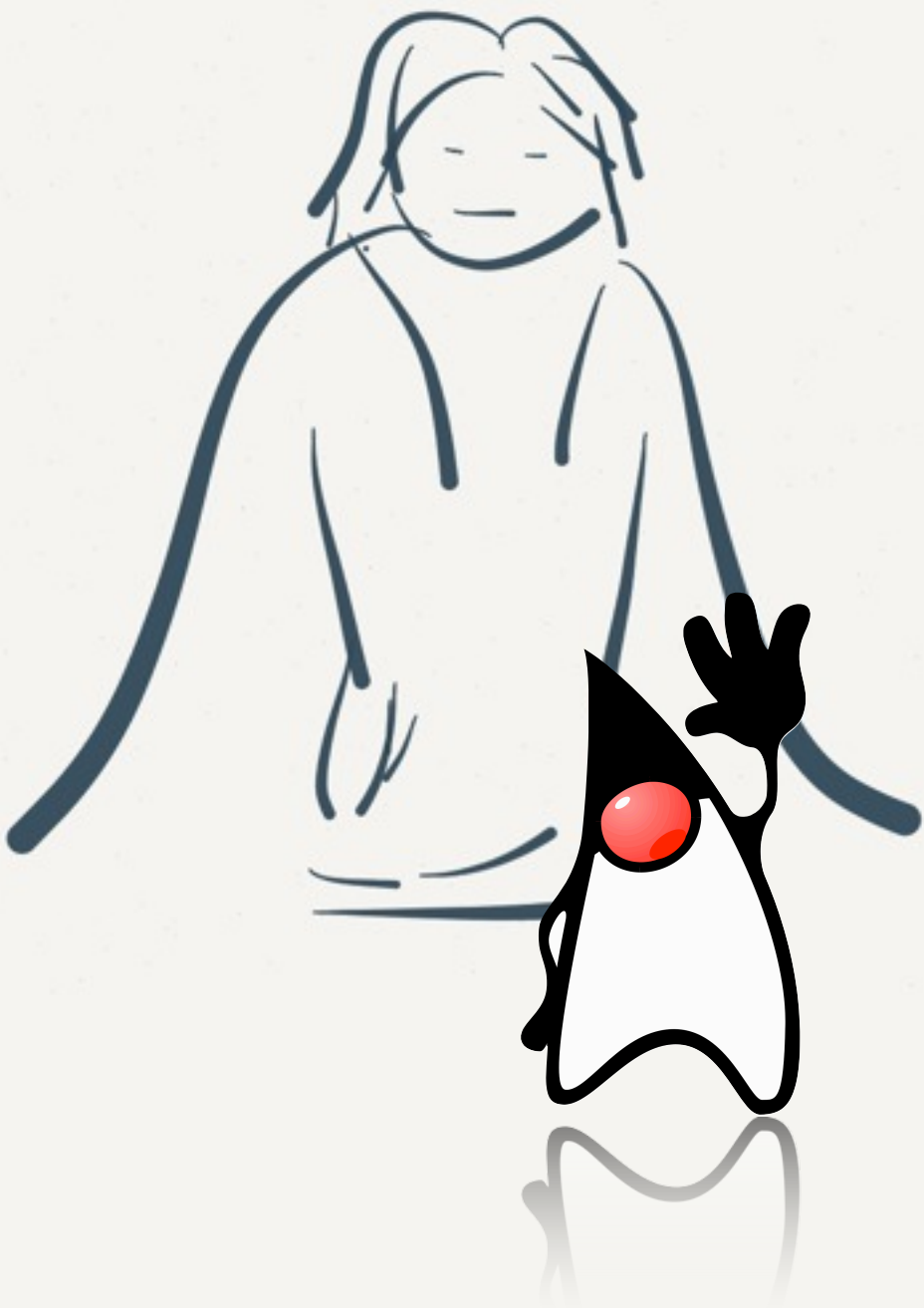


Side  
effect

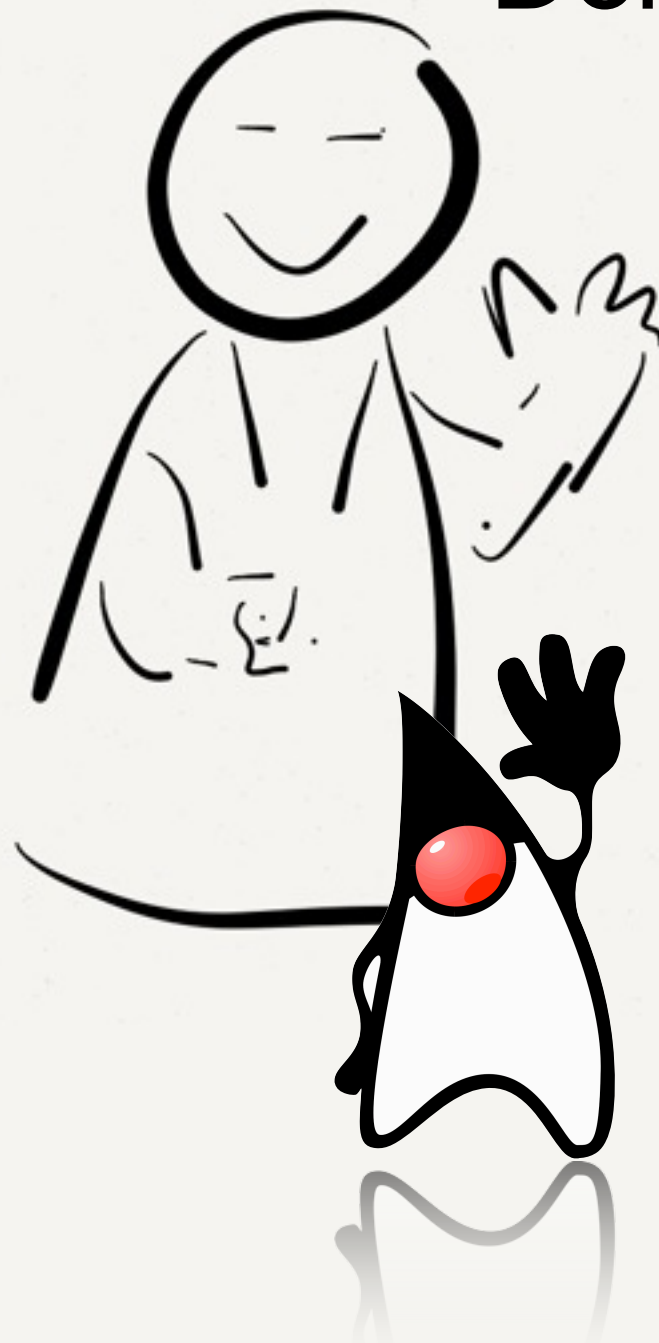




Who's he?

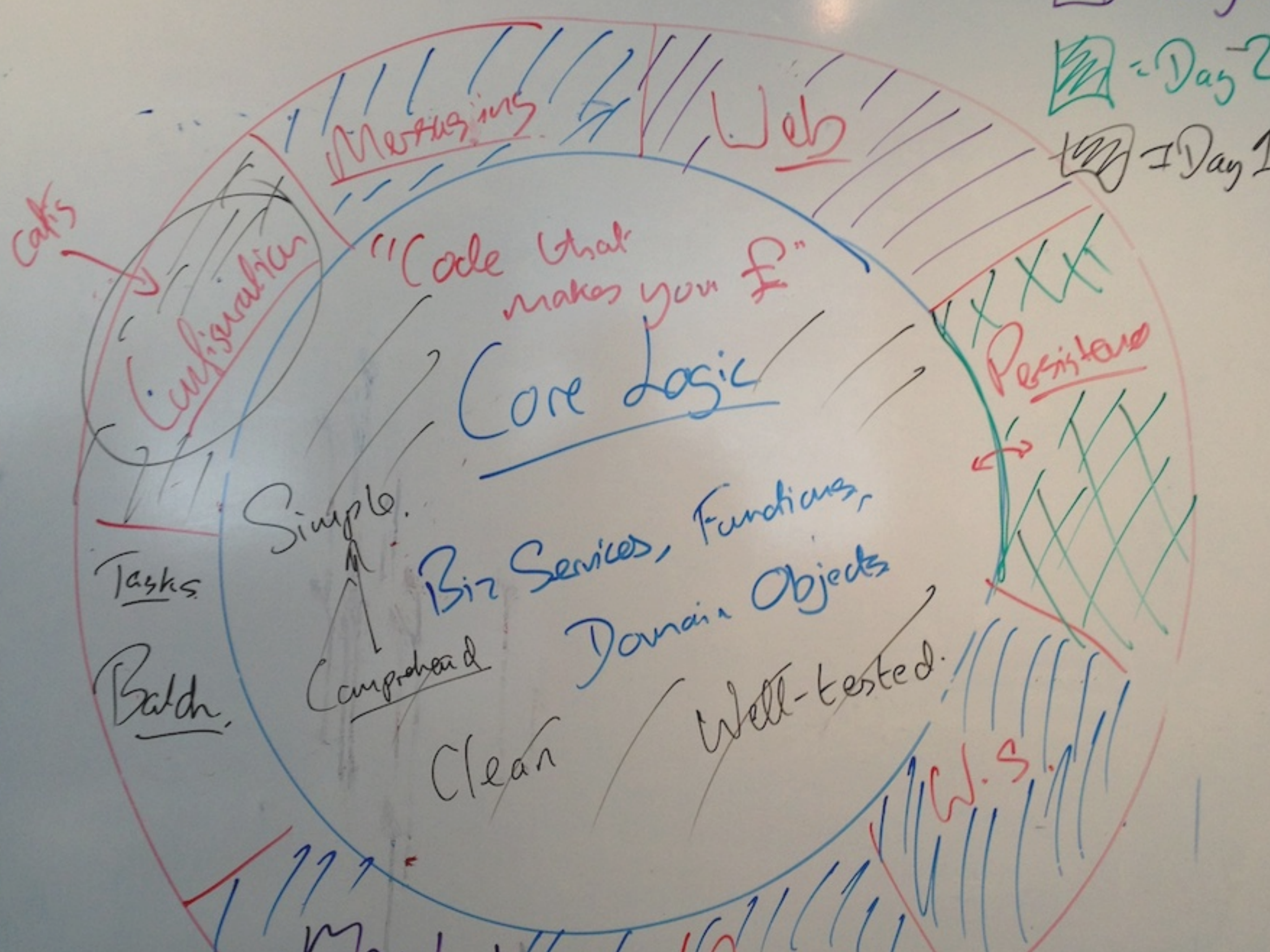


Nothing to see here,  
Don't worry about it...

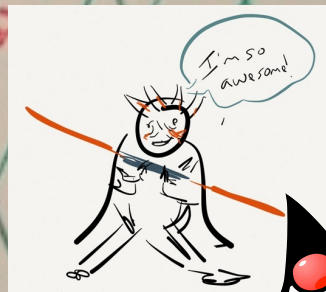
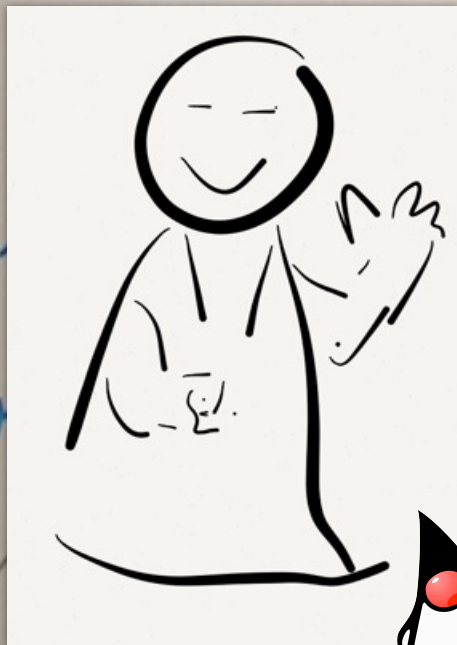
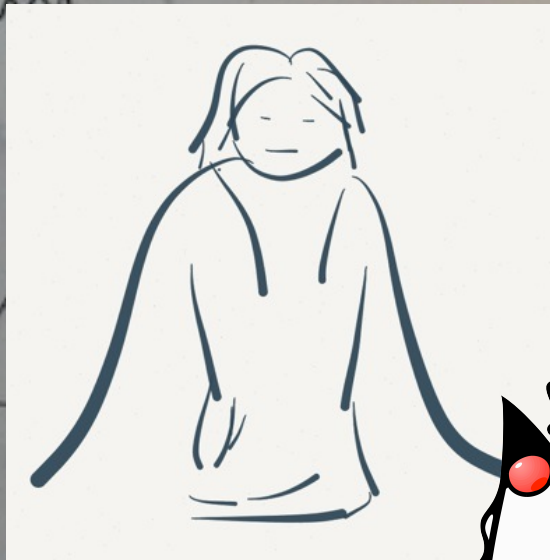




Day 2  
Day 1



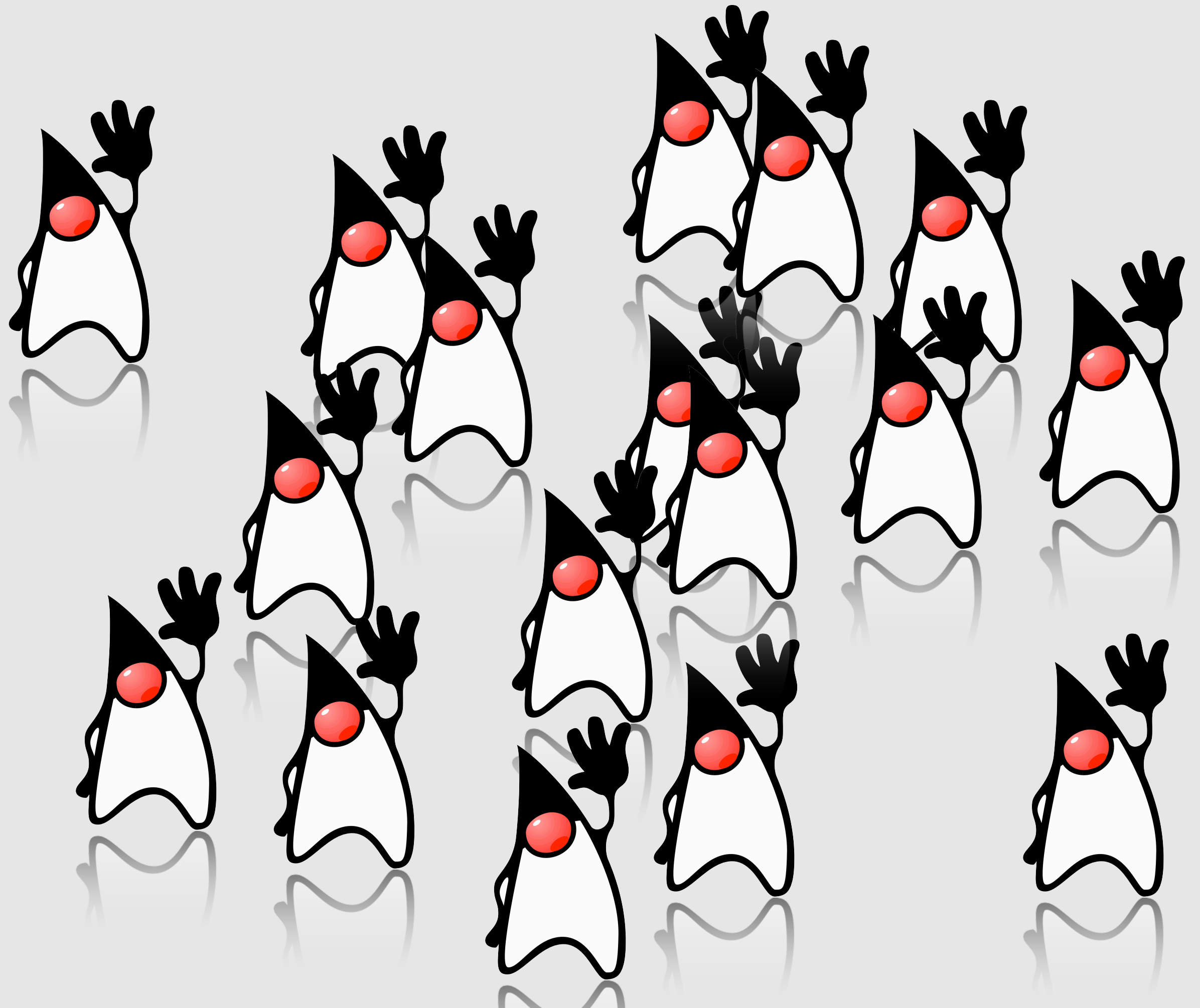




(Still)

Java; everywhere!

Or is it...?



**Each component can  
evolve/change...**

**Why?**



Repurposable

Substitutable

Simple

Component

Movable

Extendable

Combinable



**How?**



Data  
Driven  
APIs

Extrac  
side FX

Simple

functions

SOLID

/tested

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Organised  $\Rightarrow$  Reduced  $\Rightarrow$  Hidden

Ha, those silly Java  
classes with their  
baggage, no  
Monads...



Wah?



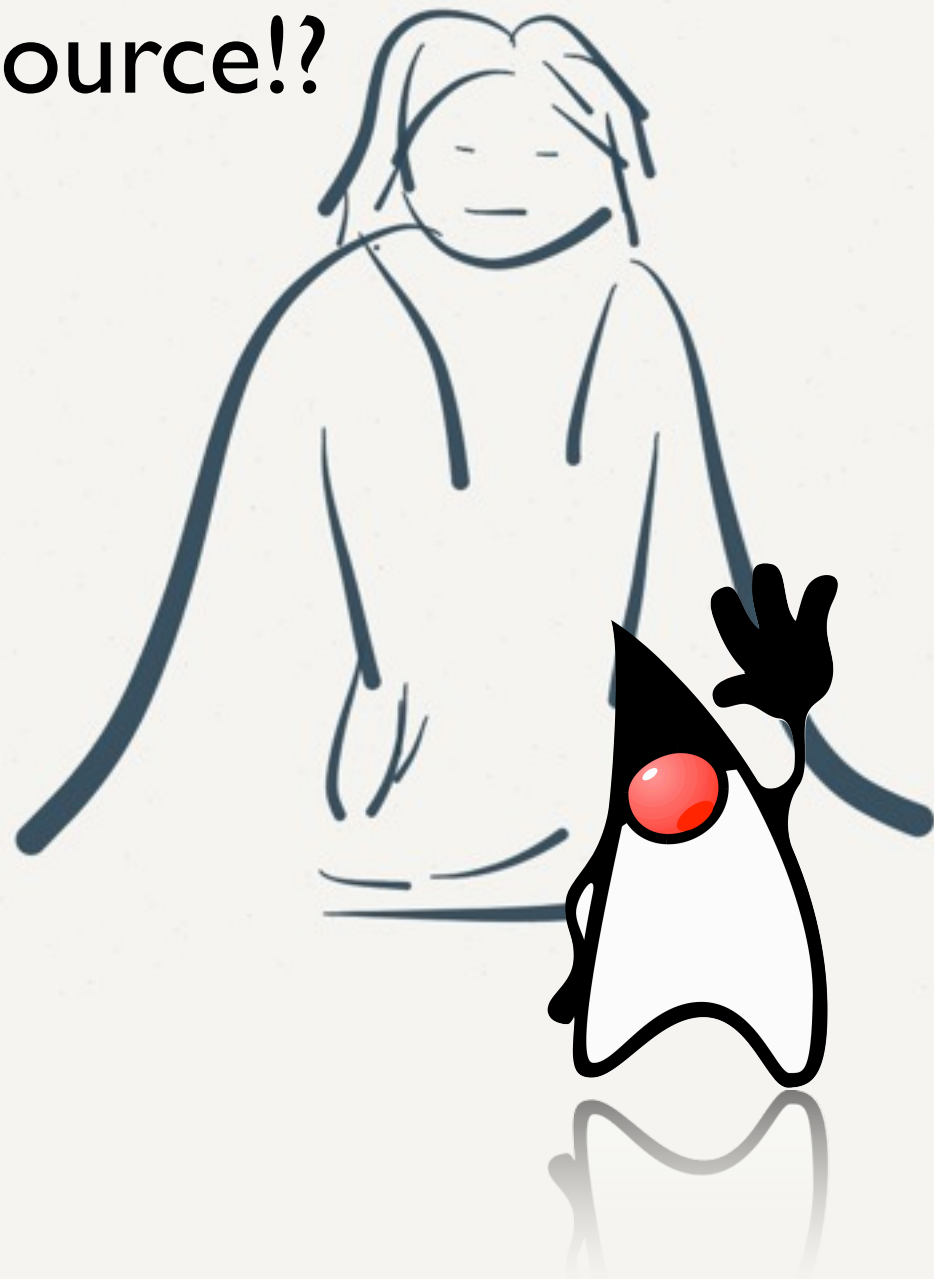
Show me your  
source!?



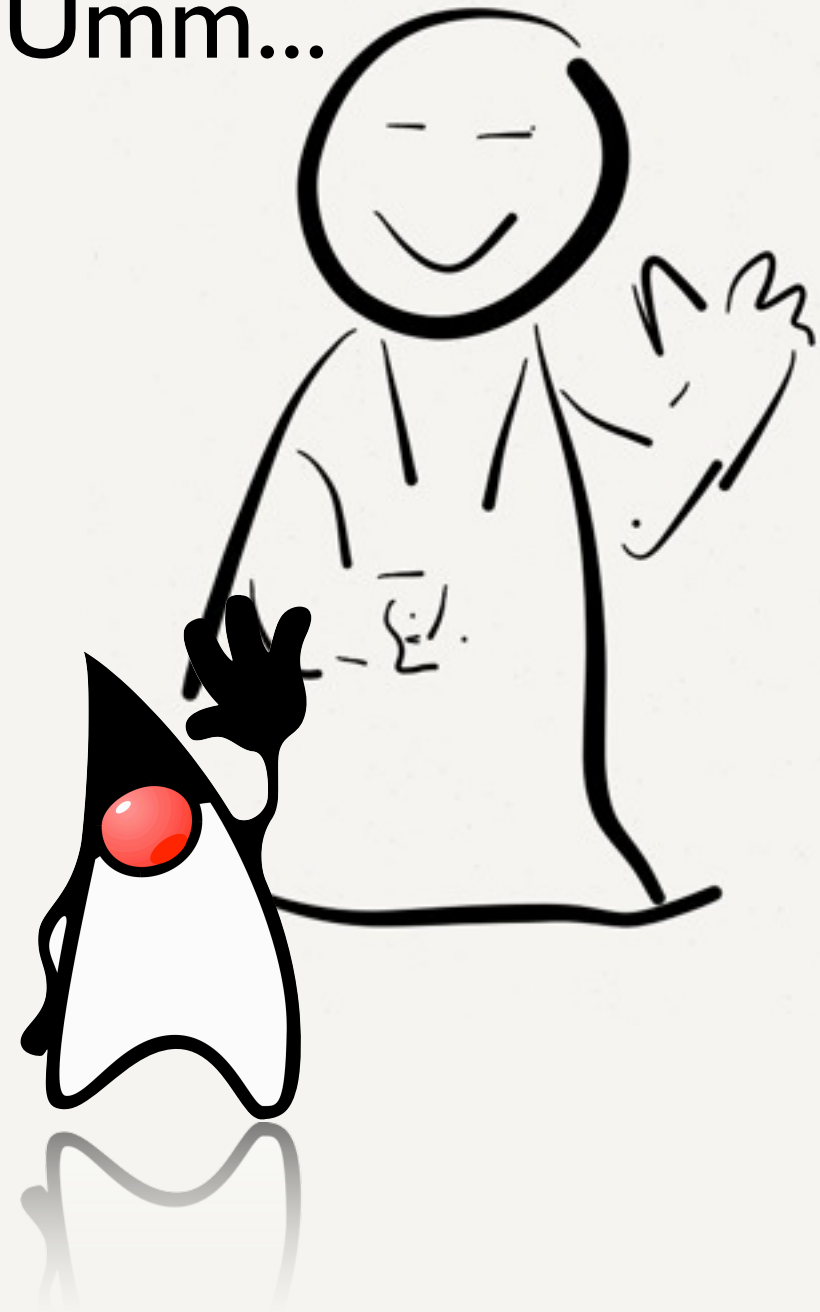
Umm...



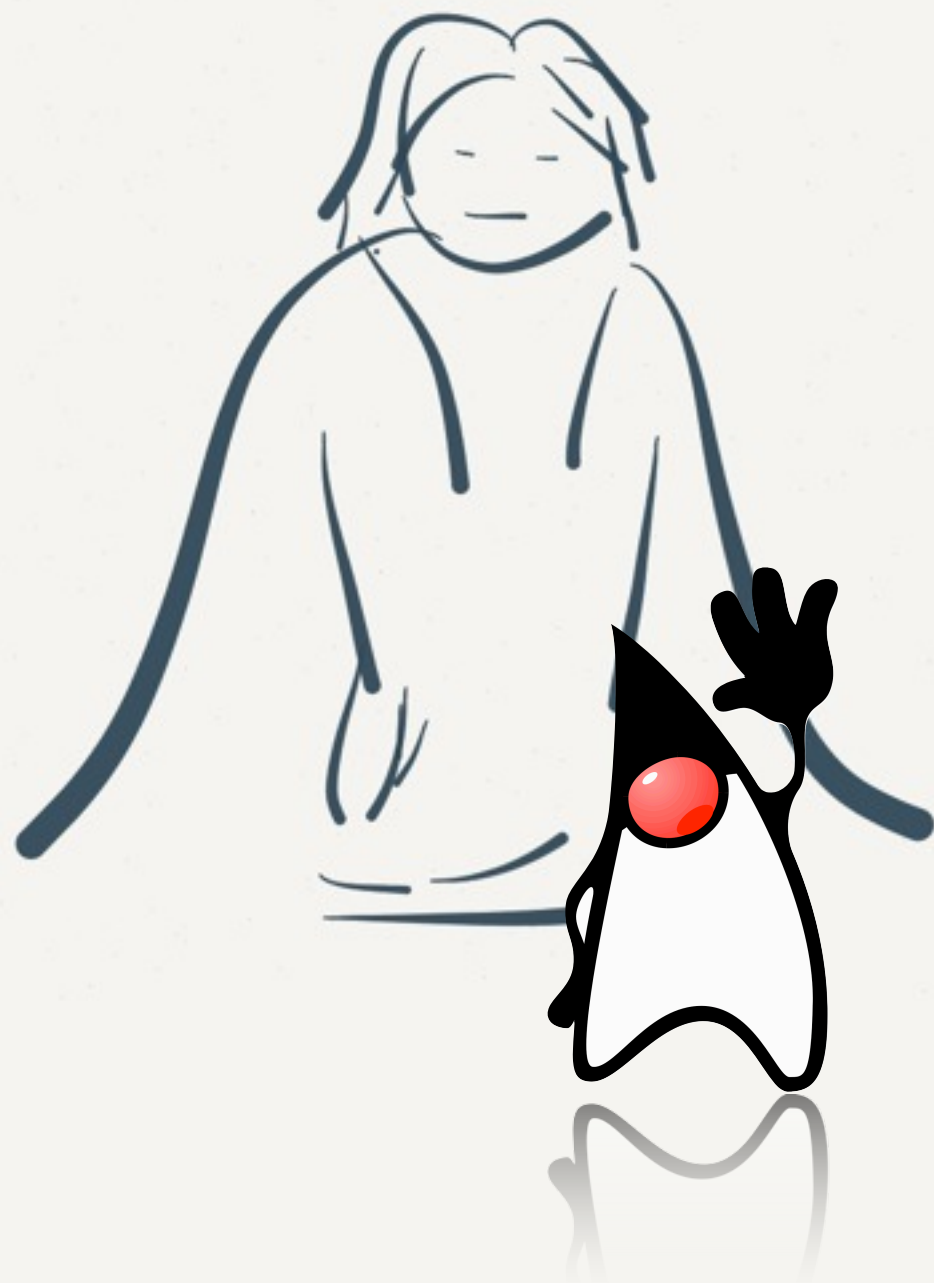
Show me your  
source!?



Umm...

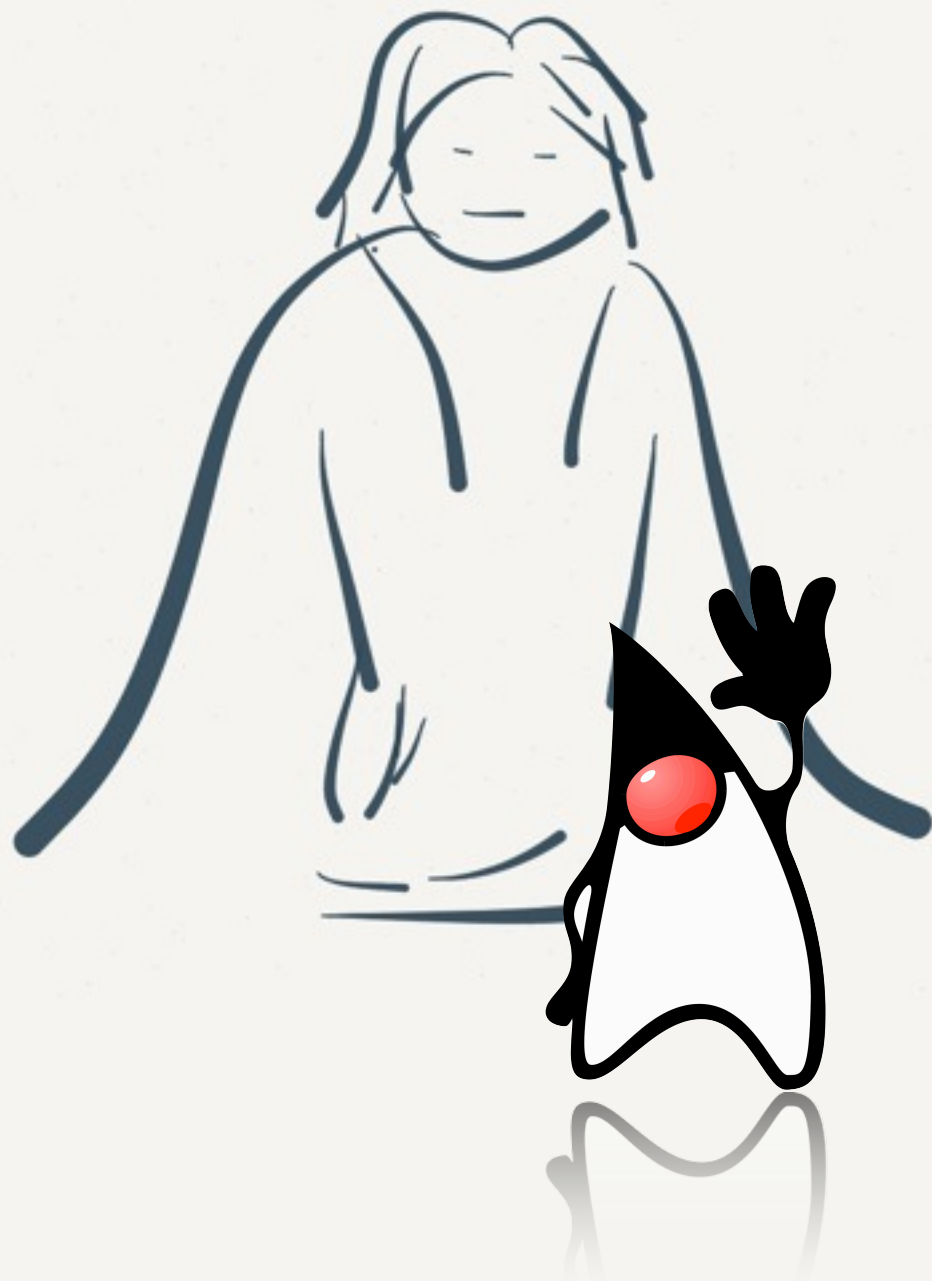


It was just simpler

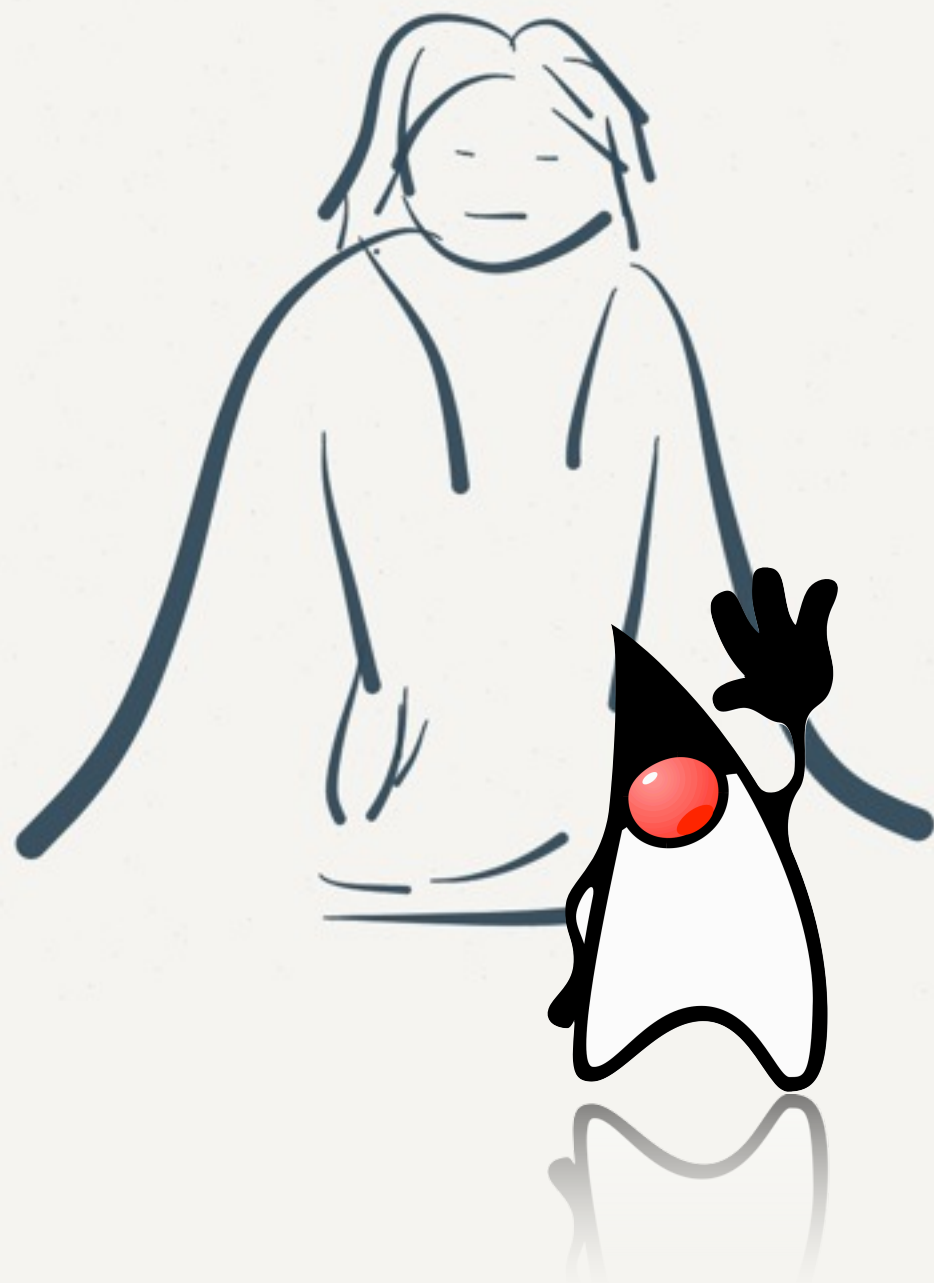




And I conducted a  
spike

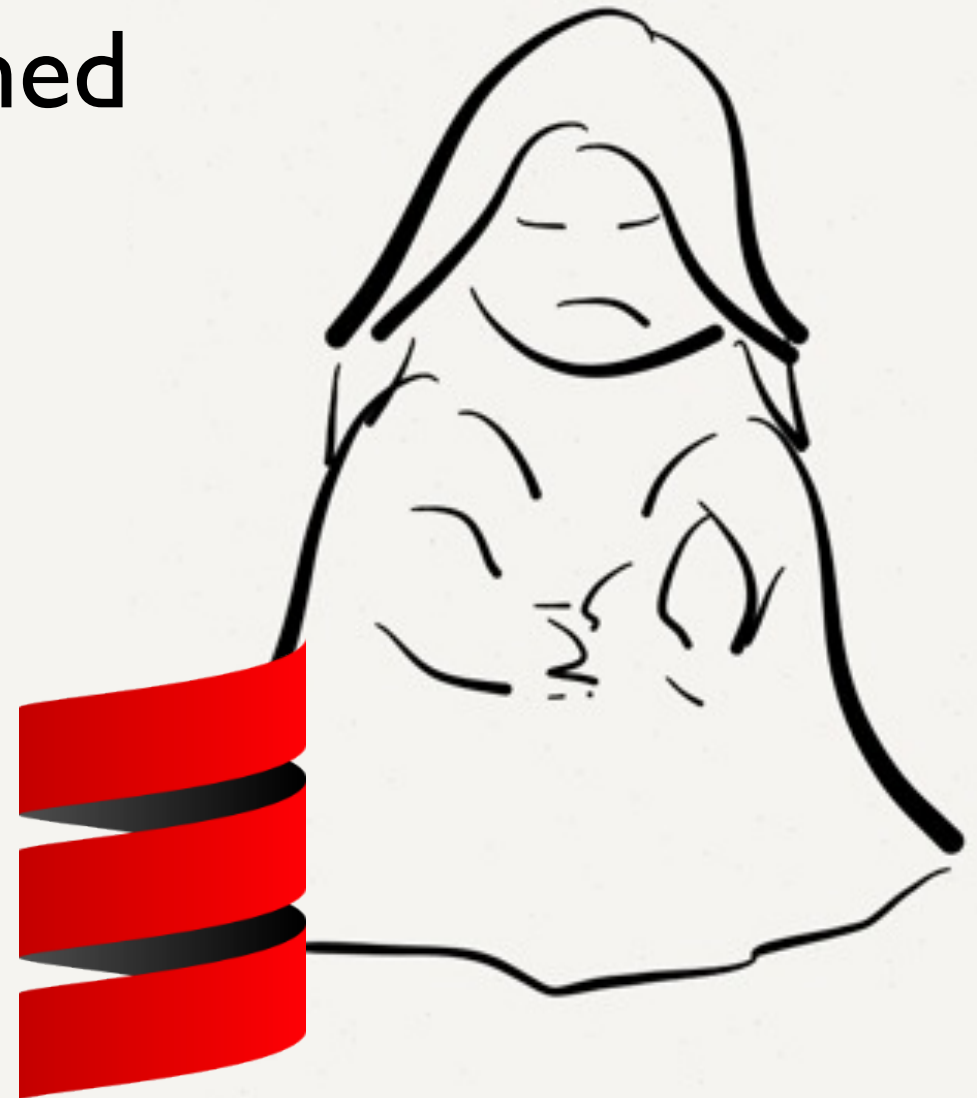


Come to the  
dark side...



Oh this is a good look for me...

And what happened  
to your face!?

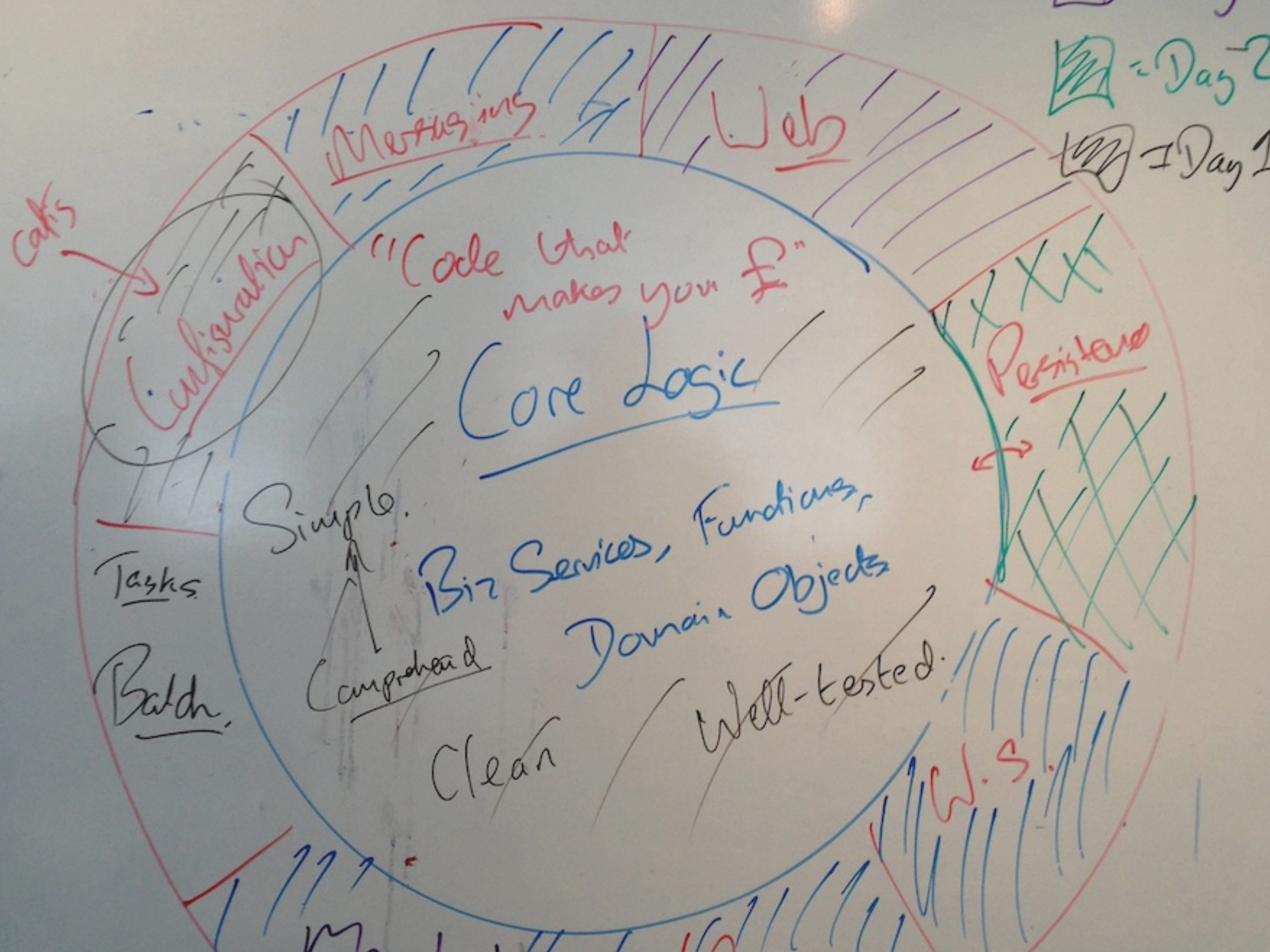




# Episode IV - A New Hope

Empire

Day 2  
Day 1





Day 2

Day 1



Web

Messaging

Cats

Configuration

"Code that makes you £"

Core Logic

Persistence

Simple

Biz Services, Functions,  
Domain Objects

Comprehend

Well-tested.

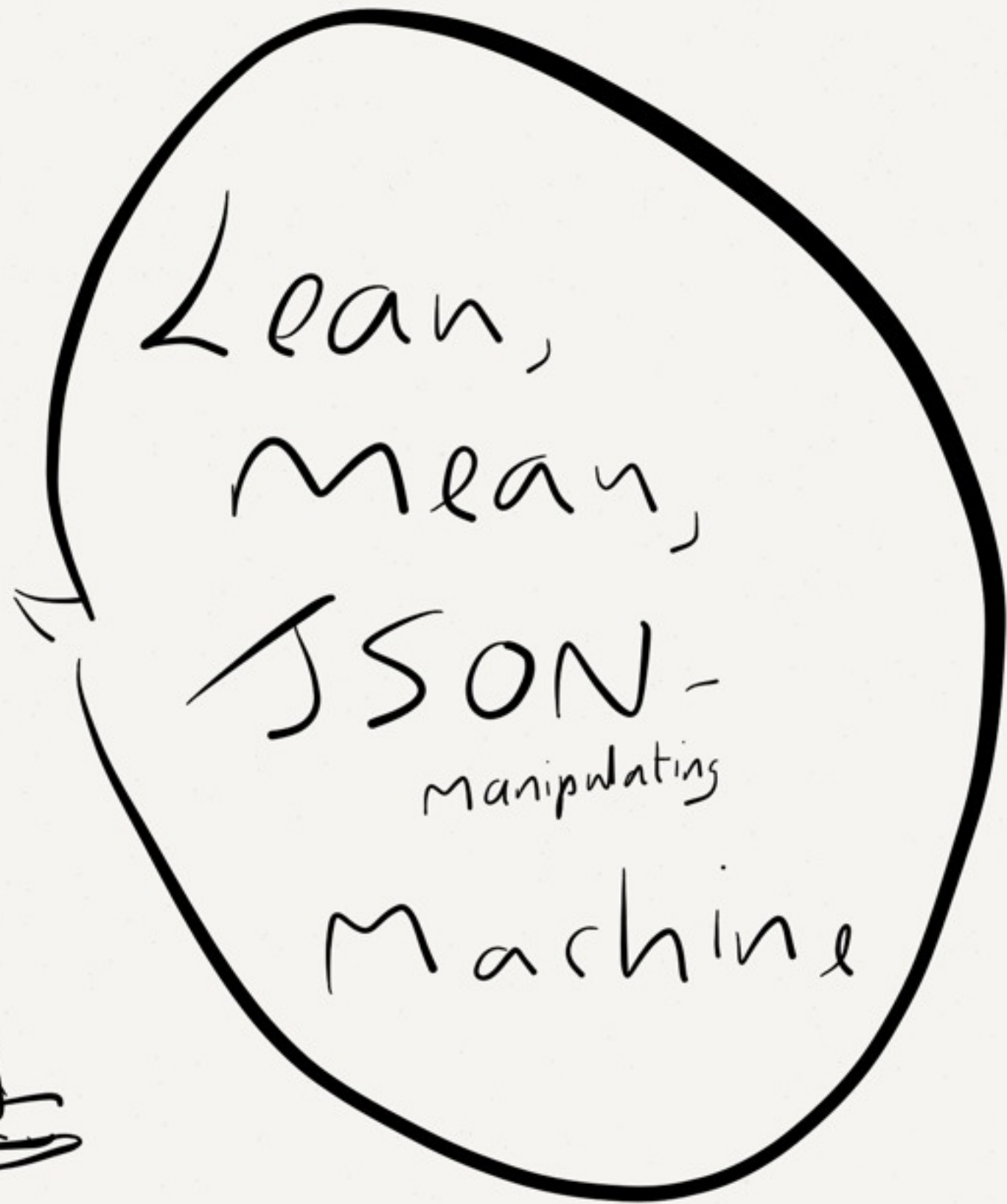
Clean

Tasks

Baldr.

W.S.







Here to test you I am



Hang on...





Well, we discussed it  
and... this was  
simpler



Actually, it gets  
worse...





Groovy



**Darth Vader (Anakin 2.0)  
gets suspicious...**

You should be ... fatter



You should be ... loser





Show me  
your  
source...



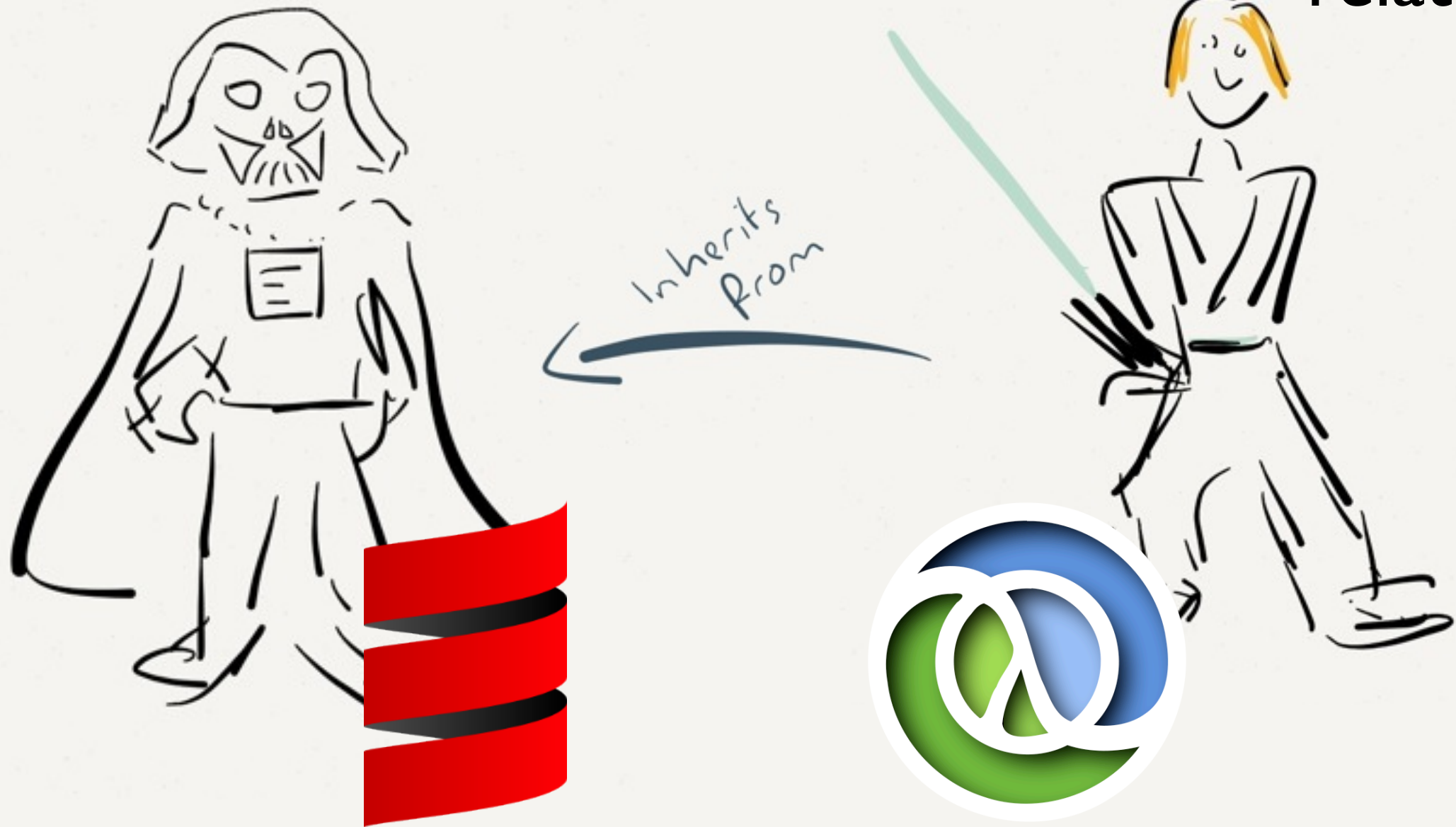
Umm...



Oh No!!!



We're still  
related...



# Type Safety!?

## Actors/ Monads!?



Values,  
STM...





# Simplicity!







I can sense the  
conflict in you father



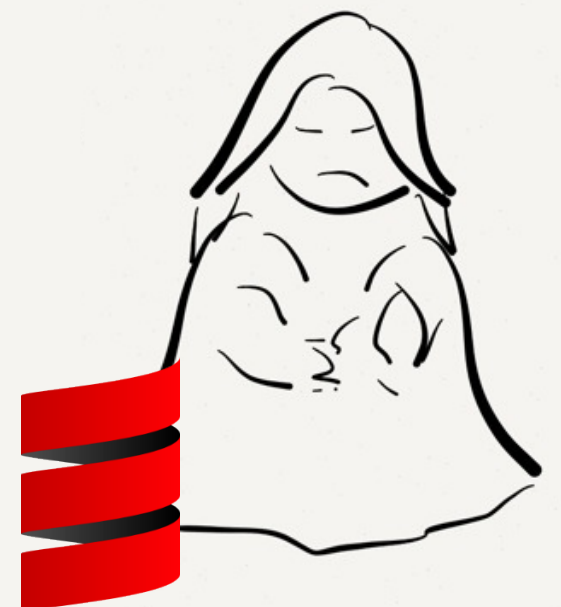
# Nooooooooooooo!



Scene omitted  
for violence



Stop! Chill... It's ok



**What really matters?**



NOT language

*Simplicity*

# Simple Components/ Functions

# Simple, Data-Driven APIs

# Enhanced Comprehension



# Agile Software

**Why?**



“The Elephant in the  
Standup”

# Epilogue



Organise

Reduce

Simplicity

Hide



Repurposable

Substitutable

Simple

Movable

Component

Extendable

Combinable



Simple  
solution

“Lunch  
spike”

Choose language  
per concern

Contrast + Compare  
NOT WAR.



# Practical Simplicity

Book  
Course

## in Software

Simplicity  
in  
Testing

Simplicity  
in Architecture  
& Design

Closure &  
Lisp

You are  
here!!

Simplicity  
in  
Code

Building  
the right  
thing

Simplicity  
in Process  
Change

Simplicity  
in  
Reqs

# Thank-you

[russell.miles@simplicityitself.com](mailto:russell.miles@simplicityitself.com)  
@russmiles

**Simplicity** *itself*

# Thank-you

[russell.miles@simplicityitself.com](mailto:russell.miles@simplicityitself.com)  
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